

# **DRAFT**

# **Prairie Slough**

# **Conservation Area**

**Ten-Year Area Management Plan**  
**FY 2016-2025**



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## OVERVIEW

- **Official Area Name:** Prairie Slough Conservation Area, # 7901
- **Year of Initial Acquisition:** The Conservation Department purchased the majority of the area in 1979 and added a small parcel to the area in 1985.
- **Acreage:** 583.86 acres
- **County:** Lincoln, Pike
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
  - A. Strategic Direction**

Manage the high quality bottomland forest and wetland communities to preserve biodiversity while providing opportunities for diverse public use.
  - B. Desired Future Condition**

The desired future condition of Prairie Slough Conservation Area (CA) is a healthy, diverse, and sustainable forest/wetland complex.
  - C. Federal Aid Statement**

N/A

## GENERAL INFORMATION AND CONDITIONS

### I. Special Considerations

- A. Priority Areas:** Leach Upper Mississippi Aquatic Conservation Opportunity Area
- B. Natural Areas:** The 406-acre Prairie Slough Natural Area consists of bottomland forest, backwater sloughs, and shrub swamp natural communities. Shellbark hickory and pin oak trees, some as much as 3 feet in diameter and 80-110 years old, dominate the natural area forest. Shrub swamp occurs in the sloughs and other depressions, where surface water is present much of the time. However, the southern third of the current natural area has suffered from degradation, primarily siltation from flooding events. This area has a lot of oak mortality and invasion of silver maple and other softwoods. The southern third of the current natural area should be evaluated as whether it needs to be removed from the natural area designation.

### II. Important Natural Features and Resources

- A. Species of Conservation Concern:** Species of conservation concern are known from this area. Area Managers should consult the Natural Heritage Database annually and review all management activities with the Natural History Biologist.
- B. Caves:** None
- C. Springs:** None

**D. Other:** Occurs in the St. Charles/Lincoln Alluvial Plain Landtype Association. This landtype association consists of an alluvial plain, numerous streams and drainage ditches, and the Mississippi River channel with numerous islands. Colluvial aprons and alluvial fans, created by loess and silt eroded from the bluffs, spread out on the alluvial plain. Much of the main bottom was historically wet prairie and marshes, and timber was restricted to strips along the rivers and on islands (Nigh & Schroeder, 2002).

### **III. Existing Infrastructure**

- 4 parking lots, Americans with Disabilities Act (ADA) accessible
- boat ramp
- 1 privy, ADA accessible
- Prairie Slough fishing pond (32 acres)
- Deer Slough fishing pond (30 acres)

### **IV. Area Restrictions or Limitations**

- A. Deed Restrictions or Ownership Considerations:** None
- B. Federal Interest:** Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.
- C. Easements:** No known easements.
- D. Cultural Resources Findings:** No known cultural resources.
- E. Hazards and Hazardous Materials:** None observed.
- F. Endangered Species:** Endangered Species are known from this area. Area Managers should consult the Natural Heritage Database annually and review all management activities with the Natural History Biologist.
- G. Boundary Issues:** None

## **MANAGEMENT CONSIDERATIONS**

### **V. Terrestrial Resource Management Considerations**

#### **Challenges and Opportunities:**

- 1) Maintain/restore bottomland forest and associated shrub swamp natural communities while dealing with altered hydrology.
- 2) Manage south wetland unit for migrating waterfowl and shorebirds.
- 3) Control invasive plant species.

**Management Objective 1:** Maintain/restore bottomland forest with an emphasis on retaining hard mast species as a component of the forest community.

**Strategy 1:** Inventory and evaluate current bottomland forest on the area in order to recognize management needs. (Forestry)

**Strategy 2:** Utilize management tools such as mechanical thinning, planting, herbicide, and prescribed fire to maintain bottomland forest community. (Wildlife)

**Strategy 3:** Monitor for forest health issues such as emerald ash borer and manage appropriately if issues arise. (Forestry)

**Management Objective 2:** Flood the south unit for waterfowl and shorebird habitat.

**Strategy 1:** When the river elevation is high enough to allow pumping, use the Mississippi River as a water source to flood the south wetland unit. (Wildlife)

**Management Objective 3:** Control invasive species.

**Strategy1:** Control invasive species as feasible. Use herbicide, prescribed fire, and mechanical methods to control invasive plant species such as reed canary grass and phragmites. (Wildlife)

## **VI. Aquatic Resource Management Considerations**

### **Challenges and Opportunities:**

- 1) Fishing is available on approximately 62 acres, depending on river stage, of open water in Prairie Slough and Deer Slough lakes.
- 2) Frequent flooding of the sloughs by the Mississippi River presents challenges for fisheries management.
- 3) Fisheries management is limited to habitat improvement when/where possible.

**Management Objective 1:** Maintain riparian corridors along sloughs.

**Strategy 1:** Maintain riparian corridors as wide as feasible along both sloughs, especially along Missouri Department of Conservation (Department) access roads, including the west side of Prairie Slough. (Wildlife)

**Strategy 2:** If possible, allow for a wider riparian corridor north of the main parking lot on the west side of Prairie Slough. (Wildlife)

**Management Objective 2:** Improve fish cover in sloughs.

**Strategy 1:** Hinge-cut select trees along each slough to provide additional fish habitat. (Fisheries)

**Management Objective 3:** Monitor depths of Prairie Slough and Deer Slough to ensure they continue to provide viable fisheries.

**Strategy 1:** Conduct depth transects on each slough at normal river stage to establish baseline depth profiles. Conduct follow-up depth monitoring after several flood events. (Fisheries)

## **VII. Public Use Management Considerations**

### **Challenges and Opportunities:**

- 1) Variety and intensity of public use requires regular area maintenance.
- 2) Illegal use of this area occurs including all-terrain vehicle use and dumping of trash at the parking lots.
- 3) Prairie Slough CA offers valuable recreational opportunities such as nature viewing/study and hunting.

**Management Objective 1:** Deter illegal activities.

**Strategy 1:** Post signage at the parking lot to inform users of area regulations and provide contact information to report violations. (Wildlife)

**Strategy 2:** Perform regular area inspections. Conservation Agents will patrol the area to ensure compliance with the Wildlife Code of Missouri and help keep the area safe and attractive for area users. (Protection)

**Strategy 3:** Utilize open communication with Conservation Agents about activities on the area. Address issues as they are reported. (Wildlife)

**Management Objective 2:** Provide public hunting and wildlife viewing opportunities.

**Strategy 1:** Maintain healthy habitat for a range of plants and animals. (Wildlife)

**Strategy 2:** Ensure that public hunting opportunities are advertised in the annual hunting regulation booklets, Conservation Atlas, and area brochure. (Wildlife)

**Strategy 3:** When the Mississippi River water level is high enough to allow pumping, flood the south wetland unit to provide open waterfowl hunting opportunities. (Wildlife)

**Management Objective 3:** Maintain parking lot, signage, privy, and entrance road.

**Strategy 1:** Maintain parking lot, privy, and signage at Department standards. (Wildlife)

**Strategy 2:** Maintain the entrance road at Department standards. (D&D)

## **VIII. Administrative Considerations**

### **Challenges and Opportunities:**

- 1) Communicate up-to-date information to area users.
- 2) Maintain area boundary markers.
- 3) Provide open waterfowl hunting in an area with high public use.
- 4) Acquire adjacent land.

**Management Objective 1:** Ensure public information about the area is accurate and up-to-date.

**Strategy 1:** Perform annual review of Conservation Atlas database and area brochures. (Wildlife)

**Management Objective 2:** Maintain well marked, accurate boundary lines and area signs.

**Strategy 1:** Maintain signs along boundary lines every four years or as needed. (Wildlife)

**Management Objective 3:** Manage the open waterfowl hunting area.

**Strategy 1:** Monitor use on the open waterfowl hunting area and minimize user conflicts. (Wildlife)

#### **Lands Proposed for Acquisition:**

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.

## **MANAGEMENT TIMETABLE**

Strategies are considered ongoing unless listed in the following table:

	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
<b>Aquatic Resource Management</b>										
<i>Objective 3</i>										
Strategy 1	X									
<b>Terrestrial Resource Management</b>										
<i>Objective 1</i>										
Strategy 1			X							
Strategy 2						X				
Strategy 3		X			X			X		
<i>Objective 3</i>										
Strategy 1			X			X			X	

## **APPENDICES**

### **Area Background:**

Prairie Slough CA is in Pike and Lincoln counties, near Elsberry. The area consists of 584 acres, including 463 acres of bottomland timber and 121 acres of open land and sloughs. The Department purchased the majority of the area in 1979 and added a small parcel to the area in 1985.

Prairie Slough, the area's namesake, was a chute of the Mississippi River at the turn of the century. The majority of the area was on the east side of the chute and was an island. Natural river meandering and human efforts have shifted the river flow away from the chute, resulting in a slough, a body of water blocked from the river on the upstream end, except during periods of flooding.

Prior to its purchase by the Department, the area was a fee-fishing area, known as Prairie Slough Fishing Paradise. The 1985 purchase added Deer Slough. Several smaller natural sloughs are also located on the area.

The area makes available for public use approximately 0.75 miles of frontage on Prairie Slough and another 0.75 miles of frontage on Deer Slough.

Two emergent marshes near the area's main entrance maintain water throughout much of the year. The marshes provide habitat for birds, amphibians, reptiles, and mammals that require water to be available throughout most of their life cycles.

Wintering bald eagles use the area. Several species of conservation concern have occurred here.

The timbered portion of the area consists of old growth bottomland hardwoods shifting to a community dominated by more flood tolerant overstory species. Common trees include pin oak, bur oak, ash, pecan, cottonwood, hackberry, silver maple, honey locust, and persimmon.

A 406-acre natural area located here protects the bottomland forest, backwater sloughs, and shrub swamp natural communities. Shellbark hickory and pin oak trees, some as much as 3 feet in diameter and 80-110 years old, dominate the natural area forest. Shrub swamp occurs in the sloughs and other depressions where surface water is present much of the time.

Buttonbush and Ward's willow occur in clumps or dense patches separated by bare soil or open water. Within the island complex, many small backwater sloughs are located in deep depression areas. Prairie Slough and Deer Slough contain permanent water, which fluctuates with the river level elevations.

**Current Land and Water Types:**

Land/Water Type	Acres	% of Area
Forest	438	75
Wetland	75.86	13
Slough	70	12
<b>Total</b>	<b>583.86</b>	<b>100</b>

**References:**

Missouri Department of Conservation. (2010). *Missouri natural areas procedures manual version 1.0*.

Nigh, T. A., & Schroeder, W. A. (2002). *Atlas of Missouri ecoregions*. Jefferson City, Missouri: Missouri Department of Conservation.

**Maps:**

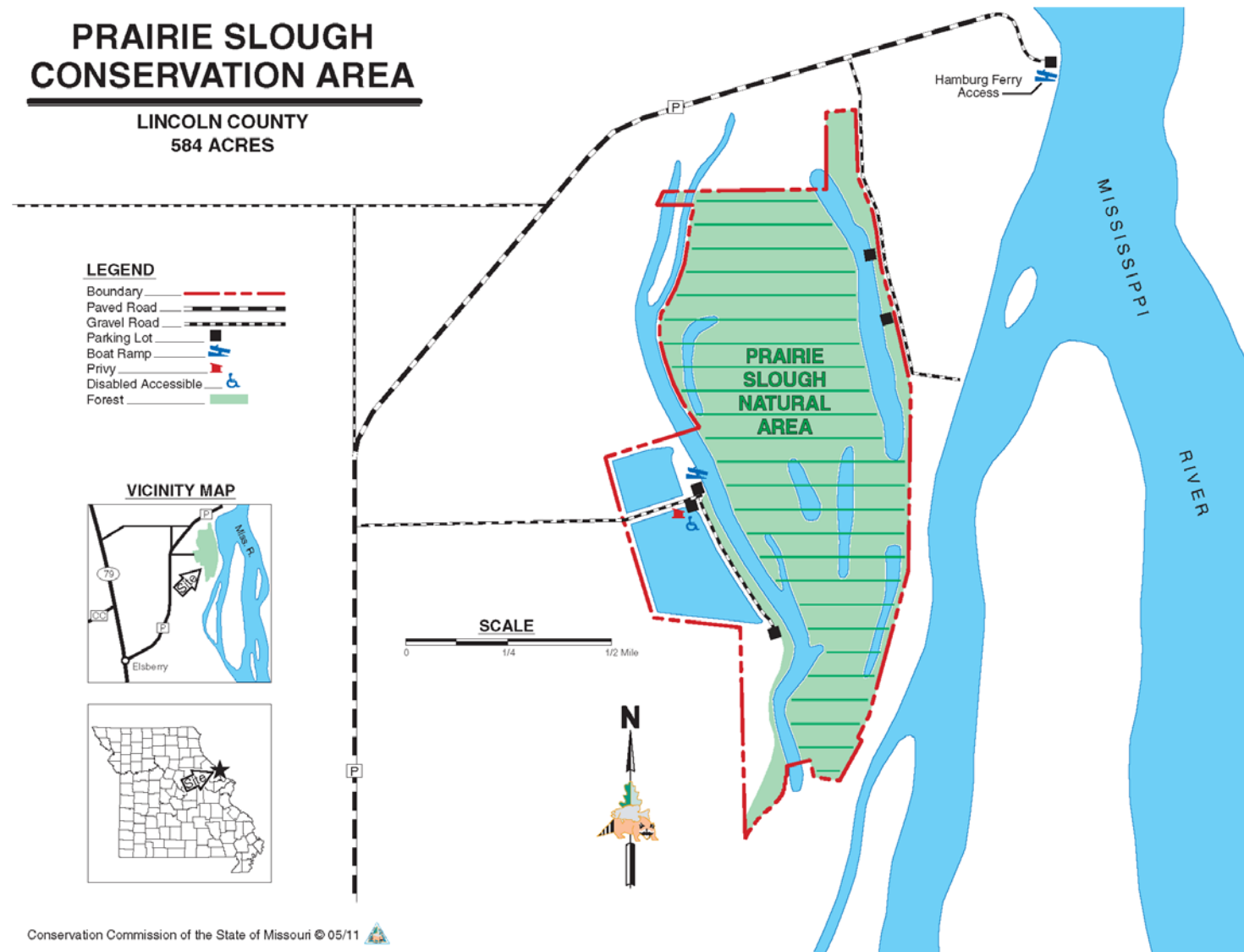
Figure 1: Area Map

Figure 2: Aerial Map

Figure 3: Cover Type



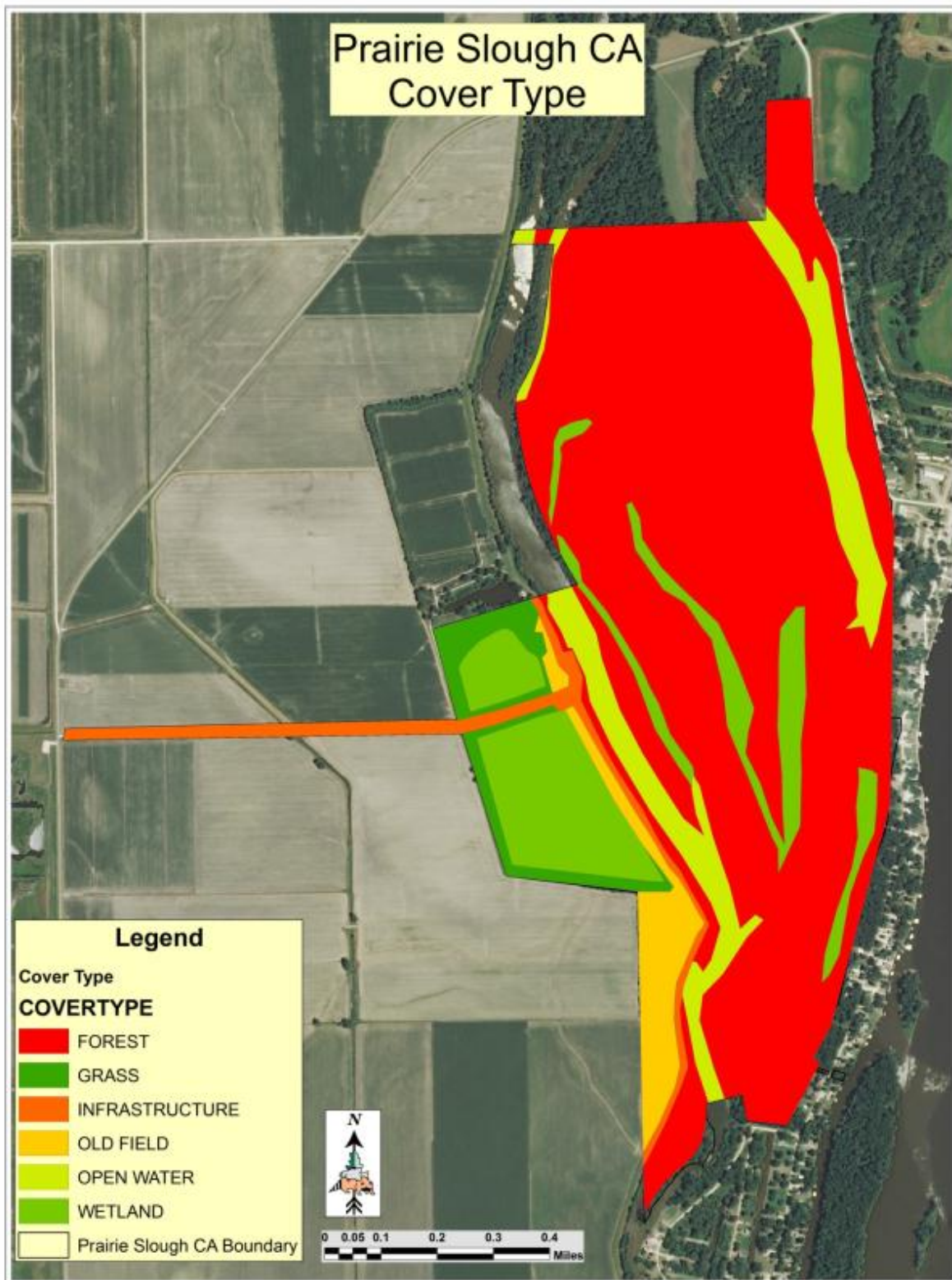
Figure 1: Area Map



**Figure 2: Aerial Map**



**Figure 3: Cover Type**



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